Carrier Owner's Handbook

Model 51FP

VENT   SHUT   EXHAUST

CLOCK | PROGRAM MODE | PROGRAM START STOP COMFORT

AM PM

THERMO SENTRY | LO MED HI FAN SPEED | COMFORT LEVEL

Carrier

CLOCK AM/PM		0
FAN SPEED		LO 1
COMFORT LEVEL		MED 2
PROGRAM MANUAL		HI 3
PROGRAM START		VAR 4
PROGRAM COMFORT		5
PROGRAM STOP		6
THERMO SENTRY		7
CLEAR		8
ENTER		9

WARMER

PROGRAMMED OPERATION

COOLER

FAN ONLY
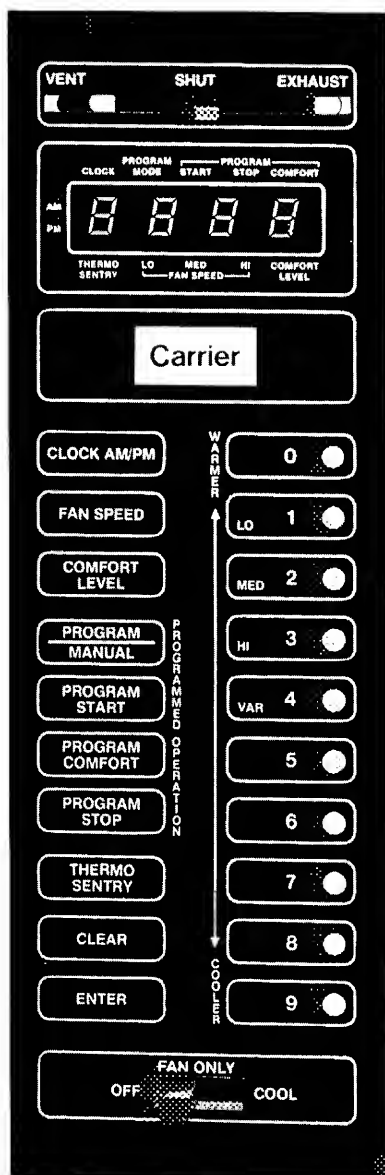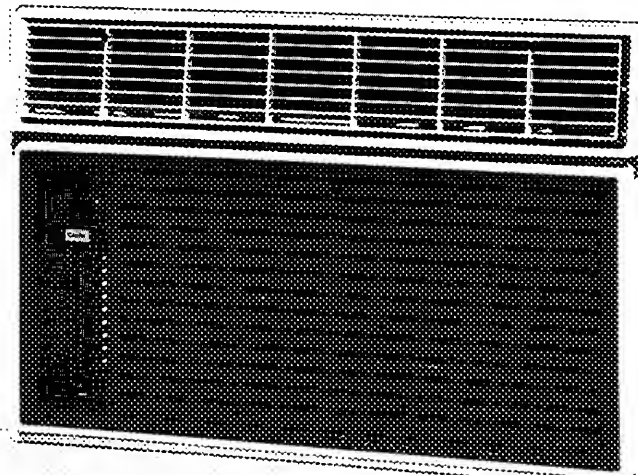OFF   COOL

Easy to follow instructions for starting and operating your new. . .

Electronic Control Room Air Conditioner

Carrier

The New Carrier Electronic Control Room Air Conditioner Puts Speed And Simplicity At Your Fingertip!

Your new Carrier room air conditioner features an amazing control panel that gives you instant, electronic operating response to your fingertip commands. It even remembers your particular comfort commands!

When you touch the control pads, according to the simple directions in this manual, a slight beep tone will signal that your command has registered and your new Carrier unit will obey your wish. But, before you do anything. . .

FIRST, FOLLOW THESE INITIAL STEPS

1. Read and become completely familiar with this Owner's Handbook and separate Installation Instructions booklet before installing and operating your unit.

2. After unit is removed from carton, install it where you want it, making sure you use the correct electrical outlet.

3. Once installed, you can have cooling immediately, before beginning your programming operations. Go ahead. Turn it on and enjoy instant cooling as you read this manual. Take your time reading. You should understand these instructions thoroughly for efficient operation.

4. Plug unit in Flashing 8's will appear.

5. Make sure bottom slide lever is positioned all the way over to the right on COOL.

6. Be sure top lever for air exchange control is positioned in the middle on SHUT.

7. Fan will begin to operate immediately

8. In 3 minutes, compressor will begin to operate and cooling begins. Carrier provides this quick start-up feature to give you medium cooling right away while you become familiar with your unit's operating procedures. The 3-minute delay also provides compressor protection.

STOP! DON'T TOUCH ANY OF THE OTHER CONTROLS. WHILE YOUR UNIT IS COOLING INITIALLY, READ THIS HANDBOOK. AT THIS POINT, WINDOW DISPLAY IS STILL SHOWING FLASHING 8's.
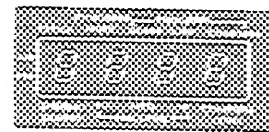
CHECK LIST OF DO'S AND DON'TS

1. Read instructions carefully

2. Be sure air conditioner sleeve is firmly anchored. Once in place, check for looseness and rocking.

3. Use the correct outlet type. Consult your Carrier dealer and Installation Instructions for correct type. It should be wired according to local electric codes. It should be a 3-prong, grounded, 115-volt or 230/208-volt (depending upon model), a-c outlet.

4. To avoid shock or injury, use only a grounded receptacle.

5. Do not use a plug adapter.

6. If you must use an extension cord, consult your Carrier dealer for the right size and plug type.

7. To protect your warranty, and for safety, do not alter the power cord or plug.

8. Use only time-delay fuses or circuit breakers.

9. Avoid running your air conditioner near anything flammable.

10. Lift and handle unit carefully, avoiding any sharp edges Obtain assistance when lifting.

11. If you use an outside air conditioner cover during off-season, be sure to remove cover during cooling season. Don't run air conditioner with outside cover on.

12. Touching control pads with sharp objects (pencils, utensils, fingernails, etc.) may damage or scratch pads. Use only your fingertip for touching control pads.

① Air Exchange Control
   VENT brings in fresh, outdoor air.
   SHUT circulates cooled, indoor air.
   EXHAUST expels stale air.

② Window Display
   Shows time of day.
   Shows selected settings.

③ Sets clock and AM or PM

④ Sets fan speed — LO, MED, HI or VARIABLE.

⑤ Selects cooling levels

⑥ Selector numerals for clock, fan and
   comfort settings

⑦ Programming controls

⑧ Away-from-home controller.

⑨ Adjusts — resets.

⑩ Enters commands

⑪ Selector switch — OFF, FAN ONLY, COOL

See specific operating instructions inside for individual selector pads.

Operating Your Air Conditioner

WINDOW DISPLAY

The window display gives you the time of day. Also, small marker lights light up in the window display to show you what settings have been programmed. For instance, if you set fan speed for HI, a small arrow marker will appear in the window display over the word HI.

How To Set Clock

Now that unit is plugged in, figure 8's are flashing and initial cooling has started as described in opening section of this handbook (page 2, Initial Steps), set your clock first
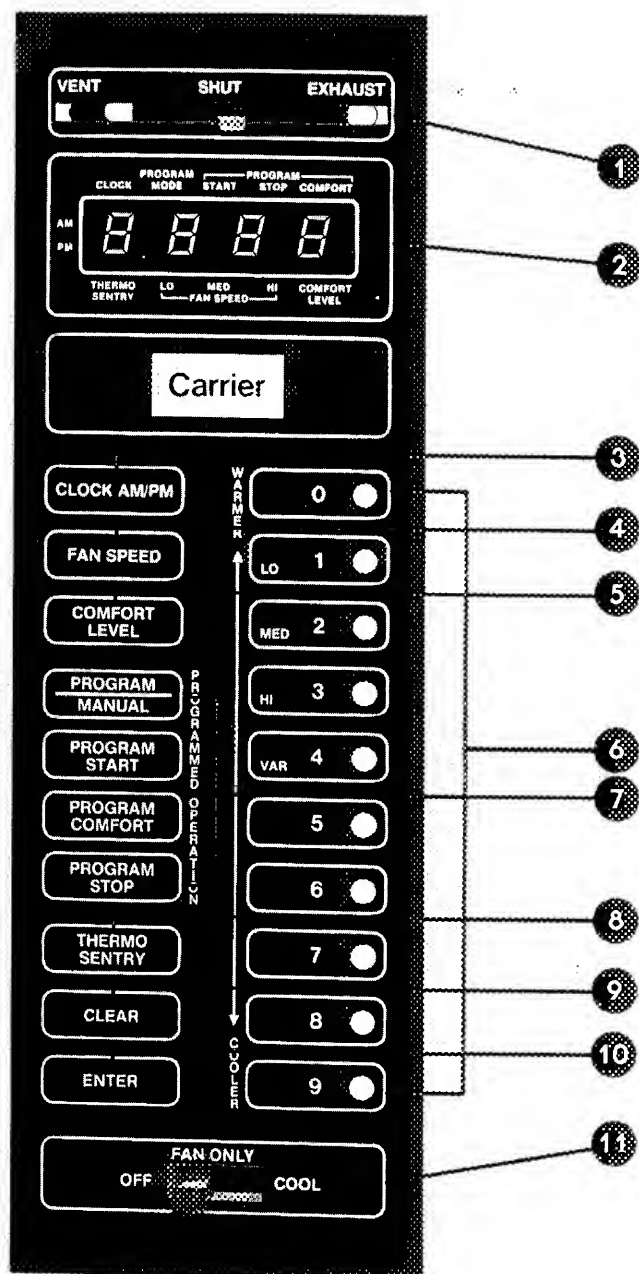
1 Touch ▓▓▓ pad It should already be in AM mode. Check marker light in window display at AM or PM. If you want the PM mode, touch ▓▓▓ pad again. Note the marker light changing to PM. With each touch of ▓▓▓ pad, you will change mode from AM to PM or vice versa.

   NOTE. With each touch of any pad, you will hear a slight beep, indicating your touch has recorded **If you do not hear beep, touch again!**

2 When you touch ▓▓▓, flashing 8's disappear and 12:00 AM appears in window display.

3 A marker light will blink under CLOCK in window display While marker light is blinking, insert correct time You have 10 seconds between each touch If you do not make next touch within 10 seconds, you must begin again.

   EXAMPLE: For 6:45, touch ▓▓▓, ▓▓▓, ▓▓▓ .

4. Touch ▓▓▓ Marker light, under CLOCK in window display, stops blinking. Time is entered.

NOTES: 1. Clock does not set seconds. 2. To erase time, touch ▓▓▓ Touch ▓▓▓ . Time disappears from screen. Touch ▓▓▓ to keep time off screen Although time remains off screen, time is memorized To check time, touch ▓▓▓ Time is displayed for 10 seconds, then disappears. 3. To bring time back to screen, touch ▓▓▓, touch ▓▓▓

FAN SPEED

There are 3 fan speeds, LO (1), MED (2) and HI (3). Fan speed affects amount and speed of cooling. HI gives more cooling, etc.

   Fan speed can also be set at VAR (4). In VAR, fan operates at all 3 speeds intermittently, depending on

Operating Your Air Conditioner (cont)

what speed the air conditioner is calling for at the time If room is hot, fan adjusts to HI (3). If room temperature is moderate, fan shifts to MED (2) If room is cool, fan shifts to LO (1). VAR also provides a lower sound level when cooling requirements are reduced

To Set Fan Speed

Touch ▓▓▓ Time disappears in window display. Initially, number 4 will appear in window display. Marker lights appear above **each** fan speed (LO, MED, HI), until you select the specific speed you want. If you do not select a specific fan speed within 10 seconds, time of day will return to window display and you will have to start again, and fan speed will remain as it was before you touched ▓▓▓.

EXAMPLE. For medium fan speed, touch ▓▓▓. Within 10 seconds, touch ▓▓▓. Number 2 appears in window display for 10 seconds with marker light blinking over MED position. Touch ▓▓▓ before the 10 seconds expire Number 2 disappears after 10 seconds, time of day returns and marker light remains lit at MED position. Fan speed 2 is now set.

NOTE: If you program VAR (4), follow instructions as in above example Touch ▓▓▓, touch ▓▓▓, touch ▓▓▓ Marker lights appear over all 3 fan speed positions (LO, MED, HI). Number 4 appears in window display and disappears in 10 seconds with time of day returning. As unit operates, marker light shifts between all 3 fan speed positions to indicate which speed is being called for by unit

COMFORT LEVEL

To select your comfort level:

1. Touch ▓▓▓ Initially, the number 5 will appear in the window display (this merely indicates an average comfort level as you prepare to select a specific comfort level). A blinking marker light appears above COMFORT LEVEL in the window display. You have 10 seconds to select the comfort level you want. If you miss the 10 seconds, time of day will return to the window display and you will have to touch ▓▓▓ again

2. Within the 10-second period, touch a comfort level number, 0 - 9, for the comfort level you want. 0 for least cooling, 9 for most cooling
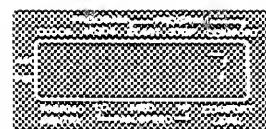
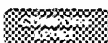EXAMPLE. If you want comfort level 7, touch ▓▓▓ Number 7 appears in the window display, marker light continues blinking over COMFORT LEVEL in window display.

3. Touch ▓▓▓ to set your comfort level The number 7 disappears in 10 seconds, and time of day returns to window display. Marker light, above COMFORT LEVEL in window display, stops blinking and remains lit to show a comfort level is set.

NOTE: If you inadvertently touch more than one number, only the last number touched is recorded Remember, a beep sounds after every recorded touch. If a beep does not sound, you must touch again

If you want to change the comfort level, touch ▓▓▓, touch the new comfort level desired, touch ▓▓▓; all within 10 seconds of each touch. If you do not select a new number after ▓▓▓ is touched, unit automatically returns to its previous setting.

If you want to check which comfort level is programmed, just touch ▓▓▓ The comfort level number appears in the window display for 10 seconds. Number then disappears and time of day returns to window display Comfort level, fan speed, etc., can be checked at any time using the above instructions

AUTOMATIC PROGRAMMING

You can operate your Carrier Electronic Control Room Air Conditioner either manually (as previously described), or AUTOMATICALLY. When operating automatically, the unit can be programmed to turn off and on at a different cooling level for a particular period of the day. For automatic operation, you use the set of four Program Control pads.

NOTE: Your Carrier Electronic Control unit has been designed to accommodate a maximum of two programmed comfort settings within a 24-hour period Check the examples below

Example 1: Temperature Up — Leave for work. Temperature Down — Before return. Unit switches to warmer comfort level when you leave for work, then switches back automatically to a cooler level before you return from work.

Example 2: Unit Off — Leave for work. Unit On — Before return. Unit shuts off completely when you leave

4

for work, then comes on again automatically at your preferred cooling level when you return from work

Example 3: Temperature Up — Leave for work. Temperature Down — When family member returns during day. Unit goes to warmer comfort level when family leaves for work and school, then goes to a cooler level when a member returns. This level remains day and night until unit again switches to the lower cooling level.

Operation for Example 1:

☐ Low cooling period

☐ Hi cooling period.
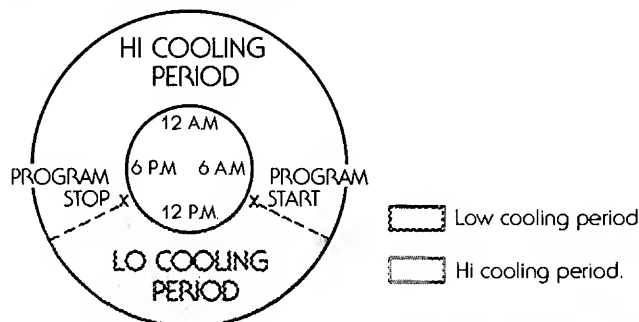
A. To set **time** you want unit to go to warmer comfort level:
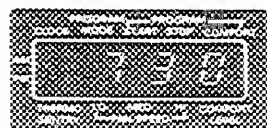
1. Touch ▦. Time disappears for 10 seconds, and marker light flashes under PROGRAM START in window display
2. Touch time numbers, such as 7 - 3 - 0 for 7:30. Each touch must be made within 10 seconds. Numbers appear in window display
3. Check arrow marker light for AM or PM. If PM is lit, touch ▦ again to switch to AM if desired, and vice versa.
4. Touch ▦

B. Now, set for the warmer comfort level you want while nobody is at home.

1. Touch ▦. Keep the 10-second rule in mind between touches.
2. Touch warmer comfort level **number** desired. Numbers range from 0 - 9. The lower the level, the more energy is saved.
3 Touch ▦

C. Now, set the time you want your preferred cooling level to begin again.

1. Touch ▦
2. Touch time numbers, such as 4 - 0 - 0 for 4:00.
3. Check arrow marker light for AM or PM. If AM is on, touch ▦ again to switch to PM, or vice versa.
4 Touch ▦ .
5. Finally, touch ▦ to begin automatic operation as you have commanded.

NOTES.
- The PROGRAM MODE marker light tells you programmed operation is in effect.
- If you touch PROGRAM/MANUAL again, the PROGRAM MODE marker light goes out and unit returns to manual operation.
- To check the commands you have programmed, simply touch its corresponding pad. The command and its blinking marker appears in the window display for 10 seconds. The command then disappears and time of day reappears.

Operation for Example 2:

A. To set time you want unit to **go off,** follow the same directions as in Example 1 for setting Program Start time.

B. Now, program unit to automatically shut off. This can be achieved by touching ▦ — then ▦ — then ▦ .

C. Now, program for unit to go on again at your desired time and comfort level. Follow same directions as in Example 1 for setting Program **Stop** time.

Operation for Example 3:

This operation is identical to Example 1 with a slight difference in the PROGRAM STOP time. This example merely demonstrates that you can set your unit to automatically return to higher cooling level when other family members might need it earlier in the day. Keep in mind that only two cooling levels can be reached in automatic programming, a high preferred cooling level and a lower-cooling, energy-saving level.

Unit is now set to go off or to a different cooling level at a preset time. This is the program you get day-to-day, **unless. . .**

1. You clear the program to enter a new program.
2. You temporarily switch to manual for a particular reason.
3. You unplug your power cord or have a power failure (program must be reset).

NOTE: For automatic programming, you need not follow the exact sequence as stated above. If you wish to change a portion of your program without resetting the entire program, you may do so.

To change from automatic program to manual, touch ▦ . This interrupts your automatic program until you are ready to restore automatic. To end manual and go back to automatic, touch ▦ again Unit returns to original automatic program.
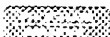
To change program to a new program, follow same directions as shown above for automatic programming.
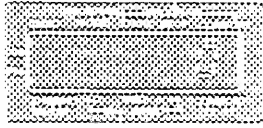
Operating Your Air Conditioner (cont)

THERMO SENTRY

This pad lets you save energy, yet maintain a comfortable temperature for pets while you are temporarily away from home Thermo Sentry keeps room temperature from getting too high.

Touch [ ] Arrow marker lights up above THERMO SENTRY in window display. Air conditioner automatically goes to lowest cooling level (O). Fan goes to HI when compressor is operating and LO when compressor is off This provides enough cooling for pets and at the same time saves energy

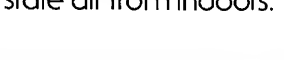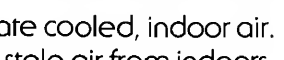To end Thermo Sentry, touch [ ] again, or touch [ ] Either touch returns unit to original operating mode.

FAN ONLY

Slide lever to FAN ONLY to shut down cooling and provide fan use only Clock also runs. Slide lever to OFF to shut everything off except clock.

Keep lever on COOL whenever cooling is needed and to operate all other functions. Your Carrier Electronic Control unit is designed to memorize your commands. Therefore, if you switched to a FAN ONLY or OFF position and wish to return to your original programmed mode, simply slide lever to COOL.

AIR CONTROL

Slide lever to VENT to bring in fresh, outdoor air. Slide lever to SHUT to close vent and circulate cooled, indoor air. Slide lever to EXHAUST to expel stale air from indoors.

Operating Tips

If EE appears in clock window display, an error has been made Touch CLEAR and start again

After touching a control pad, marker lights blink in window display next to your selection for 10 seconds. The marker lights remain on after ENTER is touched. If 10 seconds elapse before you press ENTER, you must start over.

Vacationing? Away for a weekend? Slide bottom lever to OFF **when no cooling is required.** When you return, slide to COOL to restore original settings No need to reset.

Settings you select show in window display for 10 seconds after you touch ENTER. Then time returns.

To check any setting, touch its control pad. Setting appears briefly in window display — then disappears.

If flashing 8's appear after unit has been programmed, there was a power shutdown and power is back on. You must reset all controls.

If air conditioner goes off and there is no window display light, check cord, electrical outlet and fuse. Use a time-delay fuse or circuit breaker of proper size

If room is too cold, set comfort control to a lower number and fan speed to a lower level

If room is too warm, set comfort control and fan speed higher.

If cool air is blowing uncomfortably, adjust louvers.

The more people in the room, the more cooling is needed

If air conditioner stops, but clock is running, be sure bottom slide lever is on COOL. Check programming control settings to make sure all were set properly.

If air conditioner is running but not cooling, the comfort setting may not be set properly Try increasing the cooling comfort level Check fan setting. Check to be sure there is no air blockage around unit from furniture, drapes, etc.

If there are no flashing 8's when you first turn unit on, check fuse or circuit breaker
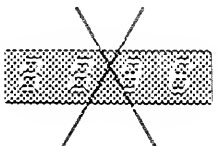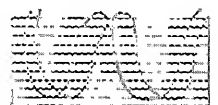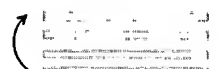
Be Economy Wise

These economy tips can help maximize comfort and reduce power consumption.

- Set your cooling level at the setting consistent with the comfort level and economy you desire Once you have determined the most economical comfort setting, leave the setting alone.
- Keep the filter clean! Normally, cleaning every 30 days is sufficient, but the filter is very efficient in removing airborne particles, and inspection may indicate the need for more frequent cleaning
- Use drapes, shades, venetian blinds, awnings, etc , to prevent direct sunlight from heating the room. Do not obstruct front of unit.
- Start your unit before outside temperature, cooking heat, or gatherings of people make the room uncomfortable This avoids the initial period of discomfort while the unit lowers the temperature and humidity to your desired level.

AIR DIRECTION

An air discharge grille is located near the top of your room air conditioner to direct air for gentle, draft-free cooling Tip the grille for upward or horizontal airflow Two levers protruding thru grille allow movement of louvers to the left or right

As an optional feature for installations mounted high on a wall, the discharge grille may be inverted to direct cool air downward. See directions in the Installation Instructions or ask your Carrier dealer about the proper procedure.

Cleaning and Maintenance

(Turn air conditioner off and remove plug from wall receptacle.)

Clogged filters can result in reduced cooling, intermittent operation, ice buildup on indoor (evaporator) coil, or blown fuses. Take a few minutes each month (more often if needed) to inspect unit filter and clean as required.

1 Press down on top corners of grille and pull outward. Lift grille from bottom retaining clips.

2 Remove filter from plastic pins in back of the grille Vacuum or wash filter in warm water Shake filter vigorously to remove excess water and replace on plastic pins (be sure the filter completely covers the face of the grille).

3. Set grille on retaining clips and push top of grille firmly onto cabinet

FILTER PINS

GRILLE

BOTTOM RETAINING CLIPS

TOP RETAINING CLIPS   FILTER
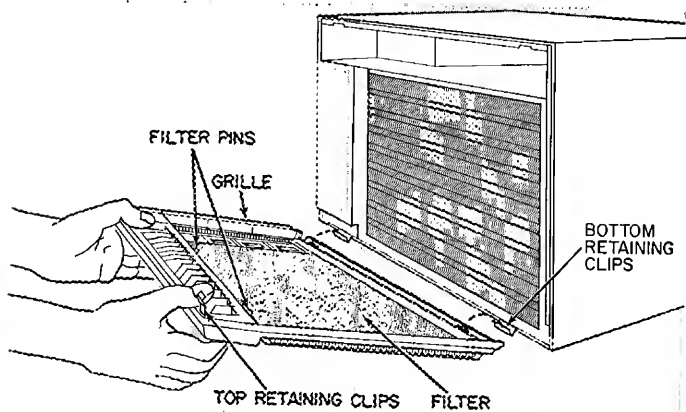
Coil — Clean cooling coil gently with vacuum cleaner. Use a soft cleaning brush attachment. If you do not have this type of vacuum, use a soft hand brush or cloth.

> WARNING: Coil fins are sharp. Be careful not to injure yourself while cleaning coil. Also, do not scratch or bend coil fins.

Clean electronic control panel, grille and cabinet periodically to keep your unit looking like new by using a soft cloth, dampened with water or a mild detergent solution

> WARNING: Before using a damp cleaning cloth, check to be sure unit is unplugged.

NOTE: When unit is unplugged, and plugged in again after cleaning, flashing 8's appear in the display. Unit must then be completely reprogrammed as described in this booklet.

Condensation on grille may occur on humid days when the unit is first started. Keep doors and windows closed during operation and the moisture should quickly evaporate. On exceptionally hot or humid days, you may notice water dripping from the rear of the unit This is normal and merely means the room air conditioner is doing its job — cooling and dehumidifying the room. If water drips into the area being cooled, check to be sure unit is mounted level (or pitched slightly to the rear).

Cleaning and Maintenance (cont)

SERVICE CHECKS YOU CAN EASILY PERFORM YOURSELF

You may find that if your Carrier room air conditioner fails to start or cool properly, the problem is minor and can be handled quickly without a serviceman To save yourself an unnecessary service call, refer to the troubleshooting chart below

PROBLEM	CAUSE	SOLUTION
Unit does not start	1. Blown fuse	Replace only once.*
	2. Circuit breaker tripped	Reset only once *
	3. Unit cord unplugged	Replug into wall receptacle.
Unit does not cool properly	1. Filter dirty	Clean filter.
	2. Improper setting	Reset to desired cooling setting.
	3. Exhaust open	Close exhaust
Ice or frost forms on indoor coil†	1 Low outside temperature	Operate FAN without cooling until ice disappears.
	2 Filter dirty	Clean filter.

*If fuse blows or circuit breaker trips a second time, do not attempt to start unit again Contact your Carrier dealer for assistance
†When outdoor temperature is approximately 55 F or below, indoor coil frosting may occur

Check periodically — A qualified service technician should check your unit periodically for normal operation, and clean and lubricate all parts as required

You should also know that liquid refrigerant passing thru the system and the sound of the compressor starting are all normal. These sounds merely mean that the unit is monitoring room temperature and conditioning the air as needed

If your unit still fails to operate properly after you complete all of the owner's service checks, contact your Carrier dealer or the authorized service center he recommends.

If still not satisfied, contact the Carrier distributor serving your area.

Next, you may write Carrier Air Conditioning Company, Consumer Relations Department, P.O. Box 4808, Syracuse, N Y 13221.

Should you still feel your problem is unresolved after contacting Carrier, you may request third party arbitration. MACAP, a group of independent consumer experts voicing views at the highest levels of the major appliance industry, provides this service. Write: Major Appliance Consumer Action Panel
20 North Wacker Drive
Chicago, Illinois 60606

State your name, address and telephone number; model and serial numbers of air conditioner; date purchased and from whom (include address); servicing agent's name; location of air conditioner and clear description of problem and service required.

Warranty Information

A 5-year Warranty certificate is included with the unit. Warranty coverage becomes effective on the date of sale. Therefore, it is a good idea to keep your bill of sale and warranty in a safe place wih your Owner's Handbook.
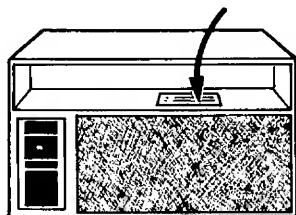
*To find model and serial numbers, remove decorative front grille and refer to nameplate located as shown

Record here and retain the information your serviceman needs to know about your unit.

Dealer's Name _____

Address _____

Telephone _____

Purchase Date _____

Model No.* _____

Serial No.* _____